

## PALOUSE RIVER BASIN

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13348000 SOUTH FORK PALOUSE RIVER AT PULLMAN, WA

LOCATION.--Lat 46°43'57", long 117°10'48", in NE 1/4 NE 1/4 sec.6, T.14 N., R.45 E., Whitman County, Hydrologic Unit 17060108, on right bank at State Street crossing in Pullman, 600 ft upstream from Missouri Flat Creek, and at mile 22.2.

DRAINAGE AREA.--132 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1934 to September 1942, December 1959 to September 1981, May - September 2001. Chemical analyses water years 1974, 1978 to June 1980.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,326.3 ft above sea level. Prior to March 19, 1934, nonrecording gage at site 30 ft upstream.

REMARKS.--No estimated daily discharges. Records good. Minor diversions for domestic use above station. Slight regulation caused by pondage at Robinson Park Dam on headwaters and by Moscow sewage disposal plant on Paradise Creek. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--29 years (water years 1935-42, 1961-81), 39.0 ft<sup>3</sup>/s, 4.01 in/yr, 28,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,570 ft<sup>3</sup>/s Jan. 21, 1972, gage height, 9.46 ft; minimum, 0.1 ft<sup>3</sup>/s Sept. 23, 1942, gage height, 0.50 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1910, 9.5 ft Feb. 26, 1948, discharge, 5,000 ft<sup>3</sup>/s. Flood of Jan. 24, 1959, reached a stage of 6.5 ft from floodmarks, discharge, 1,860 ft<sup>3</sup>/s. Flood of Dec. 22, 1933, reached a stage of 6.0 ft from gage readings furnished by Washington State University, discharge, 1,800 ft<sup>3</sup>/s.

EXTREMES FOR MAY TO SEPTEMBER, 2001.--Maximum discharge, 85 ft<sup>3</sup>/s June 27, gage height, 2.25 ft; minimum discharge, 2.3 ft<sup>3</sup>/s Sept. 10, 16, 19, 20; gage height 0.67 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY  | JUN   | JUL   | AUG   | SEP   |
|-------|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| 1     | --- | --- | --- | --- | --- | --- | --- | ---  | 9.5   | 6.9   | 4.0   | 4.4   |
| 2     | --- | --- | --- | --- | --- | --- | --- | ---  | 8.7   | 6.1   | 4.2   | 4.5   |
| 3     | --- | --- | --- | --- | --- | --- | --- | ---  | 8.8   | 6.1   | 4.2   | 4.3   |
| 4     | --- | --- | --- | --- | --- | --- | --- | ---  | 11    | 5.8   | 3.8   | 4.8   |
| 5     | --- | --- | --- | --- | --- | --- | --- | ---  | 15    | 5.1   | 4.4   | 4.1   |
| 6     | --- | --- | --- | --- | --- | --- | --- | ---  | 14    | 6.2   | 4.7   | 3.5   |
| 7     | --- | --- | --- | --- | --- | --- | --- | ---  | 12    | 6.0   | 4.6   | 4.0   |
| 8     | --- | --- | --- | --- | --- | --- | --- | ---  | 11    | 5.5   | 3.6   | 4.0   |
| 9     | --- | --- | --- | --- | --- | --- | --- | ---  | 9.4   | 5.6   | 5.1   | 3.5   |
| 10    | --- | --- | --- | --- | --- | --- | --- | ---  | 8.2   | 5.3   | 3.7   | 3.4   |
| 11    | --- | --- | --- | --- | --- | --- | --- | ---  | 8.5   | 3.9   | 3.4   | 3.9   |
| 12    | --- | --- | --- | --- | --- | --- | --- | ---  | 9.0   | 3.9   | 3.3   | 4.4   |
| 13    | --- | --- | --- | --- | --- | --- | --- | ---  | 8.7   | 3.6   | 3.7   | 4.5   |
| 14    | --- | --- | --- | --- | --- | --- | --- | ---  | 8.1   | 3.8   | 3.7   | 4.2   |
| 15    | --- | --- | --- | --- | --- | --- | --- | ---  | 8.0   | 4.1   | 3.4   | 4.1   |
| 16    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.9   | 11    | 3.4   | 3.9   |
| 17    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.3   | 6.8   | 3.5   | 4.2   |
| 18    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.2   | 5.7   | 3.4   | 3.8   |
| 19    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.6   | 4.8   | 3.2   | 3.3   |
| 20    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.6   | 4.6   | 3.2   | 4.0   |
| 21    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.2   | 4.4   | 3.6   | 4.5   |
| 22    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.3   | 4.4   | 3.6   | 3.9   |
| 23    | --- | --- | --- | --- | --- | --- | --- | ---  | 5.6   | 5.0   | 3.9   | 3.6   |
| 24    | --- | --- | --- | --- | --- | --- | --- | ---  | 6.2   | 4.9   | 4.0   | 3.8   |
| 25    | --- | --- | --- | --- | --- | --- | --- | 14   | 5.2   | 4.5   | 3.9   | 5.3   |
| 26    | --- | --- | --- | --- | --- | --- | --- | 13   | 6.0   | 4.6   | 4.2   | 4.6   |
| 27    | --- | --- | --- | --- | --- | --- | --- | 12   | 25    | 5.3   | 4.5   | 4.9   |
| 28    | --- | --- | --- | --- | --- | --- | --- | 14   | 24    | 4.0   | 4.5   | 8.5   |
| 29    | --- | --- | --- | --- | --- | --- | --- | 12   | 12    | 4.4   | 4.3   | 6.0   |
| 30    | --- | --- | --- | --- | --- | --- | --- | 11   | 8.4   | 3.7   | 4.0   | 5.3   |
| 31    | --- | --- | --- | --- | --- | --- | --- | 10   | ---   | 4.6   | 3.9   | ---   |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 86   | 287.4 | 160.6 | 120.9 | 131.2 |
| MEAN  | --- | --- | --- | --- | --- | --- | --- | 12.3 | 9.58  | 5.18  | 3.90  | 4.37  |
| MAX   | --- | --- | --- | --- | --- | --- | --- | 14   | 25    | 11    | 5.1   | 8.5   |
| MIN   | --- | --- | --- | --- | --- | --- | --- | 10   | 5.2   | 3.6   | 3.2   | 3.3   |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 171  | 570   | 319   | 240   | 260   |
| CFSM  | --- | --- | --- | --- | --- | --- | --- | .09  | .07   | .04   | .03   | .03   |
| IN.   | --- | --- | --- | --- | --- | --- | --- | .02  | .08   | .05   | .03   | .04   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

|  | MEAN | MAX  | MIN  | (WY) | MEAN | MAX  | MIN  | (WY) | MEAN | MAX  | MIN  | (WY) | MEAN | MAX  | MIN  | (WY) |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|  | 4.16 | 9.43 | 1.08 | 1976 | 9.04 | 40.9 | 1.44 | 1940 | 36.1 | 219  | 2.70 | 1937 | 85.0 | 401  | 1.77 | 1937 |
|  |      |      |      |      |      |      |      |      | 111  | 360  | 10.5 | 1977 | 117  | 313  | 14.0 | 1977 |
|  |      |      |      |      |      |      |      |      | 57.8 | 137  | 8.20 | 1977 | 23.1 | 58.4 | 8.20 | 1977 |
|  |      |      |      |      |      |      |      |      | 23.1 | 40.5 | 5.75 | 1934 | 10.2 | 40.5 | 1.52 | 1940 |
|  |      |      |      |      |      |      |      |      | 3.69 | 7.81 | .86  | 1940 | 2.91 | 8.89 | .50  | 1940 |
|  |      |      |      |      |      |      |      |      | 2.91 | 8.89 | .49  | 1940 | 3.18 | 6.03 | .49  | 1942 |

## PALOUSE RIVER BASIN

13348000 SOUTH FORK PALOUSE RIVER AT PULLMAN, WA--Continued

## SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 1934 - 2001

|                          |     |        |       |             |
|--------------------------|-----|--------|-------|-------------|
| ANNUAL MEAN              |     |        | 39.0  |             |
| HIGHEST ANNUAL MEAN      |     |        | 111   | 1974        |
| LOWEST ANNUAL MEAN       |     |        | 7.73  | 1977        |
| HIGHEST DAILY MEAN       | 25  | Jun 27 | 3200  | Jan 21 1972 |
| LOWEST DAILY MEAN        | 3.2 | Aug 19 | .30   | Sep 1 1942  |
| ANNUAL SEVEN-DAY MINIMUM | 3.4 | Aug 15 | .31   | Sep 1 1942  |
| ANNUAL RUNOFF (AC-FT)    |     |        | 28230 |             |
| ANNUAL RUNOFF (CFSM)     |     |        | .30   |             |
| ANNUAL RUNOFF (INCHES)   |     |        | 4.01  |             |
| 10 PERCENT EXCEEDS       | 11  |        | 93    |             |
| 50 PERCENT EXCEEDS       | 4.6 |        | 8.0   |             |
| 90 PERCENT EXCEEDS       | 3.6 |        | 1.7   |             |